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| <b>Meeting</b> | <b>Surveillance of blood stream infections (BSI) in Belgian hospitals<br/>Working group meeting – Results SEP 2000-2013 &amp; Revision of<br/>protocol, data to be collected and data collection tool</b>  |
| <b>Date</b>    | June 11, 2014  |
| <b>Place</b>   | WIV-ISP  |
| <b>Present</b> | Blairon Laurent, Boelens Jerina, Bonte Julie, Demaiter Guido, De<br>Vlaminck Annick, Famerée Dominique, Gerard Michèle, Gordts Bart,<br>Heyneman Bea, Laurent Christine, Manderyck Greet, Moonens Françoise,<br>Surmont Ignace, Van den Abeele Annemarie, Van den Driesshe Natalie,<br>Lambert Marie-Laurence, Catry Boudewijn, Hammami Naïma<br>Temporary during the feedback module discussion: Benaud Etienne,<br>Malache Cedric, Fonguh Sylvanus |
| <b>Excused</b> | Michiel Costers, Milas Sandrine, Simon Anne, de Moreau Anne-Isabelle,<br>Byl Baudouin, Verbraeken Nicole, Janssen Hilde, De Deken Chantal, Van<br>Rossom Paul  |

### **Objectives of the meeting :**

- To present preliminary results from annual report 2000-2013
- To revise the SEP protocol 2013, the data to be collected (numerator, denominator) and the data collection tool (input and feedbacks)

### **Programme :**

First presentation

- Summary annual report 2013 (data 2000-2013)

Second presentation : Revision of protocol and tool

- Data to be collected
  - o SEP data, followed by discussion on decision to be made
  - o Denominator data, followed by discussion on decision to be made
- Data collection tool
  - o Experiences and suggestions from the users
- Use of data for improvement
- Research topics (no time to present)

### **Decisions made :**

SEP data (numerator data)

*Change in definition CLABSI (cfr. CDC 2013):*

- Including minimum duration of 2 days of exposure to central line
- **Decision:** the group of experts agreed not to change again the definition but to wait for future research that evaluates the impact of the revision on CLABSI rates.  
The recent change in definition in 2013 had already an impact on the numerator and we feel it is better to wait and follow CLABSI rates using the same definition.

*Clarifications to be added in the protocol:*

1. Include a remark for blood draw in **pediatric** patients (protocol CDC 2013, Quebec 2014): a single bottle is sufficient, but two hemocultures (different sites or different times) are needed to confirm case definition based on skin contaminant.

2. Harmonise exposition time linked with **urinary catheter and invasive ventilation** with protocol HAIICU 2012, Quebec 2013): exposition 2 d (even intermittently) before start infection.
3. Include the 3 criteria used by CDC to confirm a central line related blood stream infection.

*Data to be collected, and data collection tool:*

The objective is to continue to simplify data collection to the strict minimum needed to achieve the objectives and improve its usefulness as a tool for prevention.

### SEP data

| Variable   | Consensus  |
|--|--|
| <b>CVC present within 2 days before infection (required)</b> | <p>Register only the presence of a CVC in case that the suspected origin is 'unknown'. No added value and time consuming for the users if they need to complete this variable for the SEP due to another infection site.</p> <p>In analysis for origin of SEP: differentiate ['CVC suspected'] from origin ['unknown' AND CVC present (&lt;2d)]</p>  |
| <b>Origin SEP not acquired in hospital (optional)</b>        | <p>There are too many options which can be summarized in the following three:</p> <ol style="list-style-type: none"> <li>1. <i>'SEP verworven tijdens verzorging in het deelnemend ziekenhuis / acquise lors de soins dans l'hôpital participant'</i>,</li> <li>2. <i>'SEP verworven tijdens verzorging in een ander ziekenhuis of chronische zorginstelling / acquise lors de soins dans un autre hôpital ou institution de soins chroniques'</i></li> <li>3. <i>'SEP verworven in de gemeenschap / SEP communautaire'</i></li> </ol>   |
| <b>Resistance profiles</b>                                   | <p><b>Initial question?</b> include other resistance profiles than the Point Prevalence Survey (PPS ECDC) markers (target markers for ICU, HAIICU protocol): e.g. Fluoroquinolone for Enterobacteriaceae (or full antibiogram).</p> <p><b>Proposition:</b><br/>Add Carbapenemase-producing Enterobacteriaceae (CPE: options Yes, No, Unknown) next to the Carbapenem resistance.</p> <p><b>Advice taken from Prof Glupczinsky</b> (National Reference Centre, NRC) after meeting:<br/>He advises not to include CPE in the SEP surveillance, based on the following facts:</p> <ol style="list-style-type: none"> <li>1. The quality and reliability of tests for CPE detection,</li> <li>2. The source of the samples; in our epidemiological context it would not have an added value at this stage to follow CPE resistance based only on hemocultures, but rather use the existing CPE surveillance (clinical and screening samples).</li> </ol> <p>Further assessment on changes in the resistance markers to</p> |

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|                                 | be included in the specific surveillance will be needed during a next SEP workgroup meeting.  |
| <b>N hemocultures collected</b> | <p>A member of the SEP workgroup meeting highlighted the utility of including data on number of hemocultures by hospitals.</p> <p>During the SEP workgroup meeting in 2011 it has been decided that this variable was not considered to be useful to reach the objectives of the surveillance. Benchmarking or adjusting for hemocultures will not happen. Also the objective at local level is not to compare between hospitals but rather to follow its own trends.</p> <p>N.H. will look for documentation on role of number of hemocultures and spread to the members of the SEP working group.</p> |

#### Denominator data

| Variable                                    | Consensus  |
|---|--|
| <b>ICU <math>\geq</math> 2 d (optional)</b> | Keep optional (in Flemish hospitals it should be available)                |
| <b>Denominator data per ward (optional)</b> | Keep optional, also useful for hand hygiene (alcohol consumption)          |
| <b>CVC days</b>                             | Keep optional, both CLABSI rates on CVC days and pat days are interesting. |

#### Online individual data feedback

| Variable   | Actions  |
|--|--|
| <b>CVC present within 2 days before infection (required)</b> | <b>SEP per origin:</b> differentiate suspected origin = 'CVC' versus ['unknown' AND 'CVC present'] |
| <b>Origin SEP not acquired in hospital (optional)</b>        | <b>SEP not acquired in hospital (&lt;2d):</b> change into the 3 new options                        |
| <b>Trends over years</b>                                     | To be added  |

#### Planning & Summary :

1. The NRC was contacted to request for an advice on the addition of CPE as new variable in susceptibility profiles. At this stage the recommendation from the NRC is not to include the CPE in the surveillance of bloodstream infections in the hospital. The members of the SEP workgroup meeting have been contacted and informed about this recommendation.
2. In order to apply the same protocol for a full year, we will implement the revised protocol and data to be collected from January 2015 onwards (NH needs to check with ICT if this is feasible deadline).

The adjustments in the analysis regarding 'CVC' versus 'unknown and CVC' present can be applied earlier (to plan with Sylvanus Fonguh).

3. The translated SEP report should be online by the end of June 2014.
4. The SEP workgroup considers that freezing the database end of March of the next year can be kept and provides sufficient time to get the denominator data for the last trimester of the previous year.